

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 6. (Cancelled)

7. (Currently Amended) A method for screening a patient for a colorectal cancer or a colorectal precancer, the method comprising the step of:

detecting in a patient ~~tissue or body fluid~~ stool sample comprising exfoliated cells a long nucleic acid fragment of a length greater than 200 base pairs ~~that is present in both normal and cancerous or precancerous cells~~, wherein a ~~said~~ fragment of said long nucleic acid having a length less than 200 base pairs is ~~of a length that is greater than a length of said nucleic acid~~ expected to be present in said a stool sample in a healthy patient;

the presence of said fragment long nucleic acid being a positive screen for a colorectal cancer or precancer.

8. (Currently Amended) A method for screening a patient for a colorectal cancer or a colorectal precancer, the method comprising the steps of:

determining detecting in a patient ~~tissue or body fluid~~ stool sample comprising exfoliated cells or cellular debris ~~whether an~~ a first amount of a long nucleic acid of a length ~~DNA~~ fragment greater than 200 base pairs in length; wherein said long nucleic acid is present in both normal and cancerous or precancerous cells;

comparing the first amount of long nucleic acid in said patient stool sample to a second amount of said long nucleic acid present in a sample a from patient free of colorectal cancer or precancer;

determining whether said first amount of long nucleic acid exceeds a predetermined the second amount of long nucleic acid in said sample from a patient free of colorectal cancer or precancer ~~wherein said DNA fragment is a degradation product of DNA that is present in both normal and cancerous or precancerous cells; and,~~

identifying a positive screen for a colorectal cancer or precancer if said first amount of long nucleic acid in said patient stool sample does exceed said predetermined second amount of long nucleic acid in said sample from a patient free of colorectal cancer or precancer.

9. (Currently Amended) A method for screening a patient for a colorectal cancer or a colorectal precancer, the method comprising the steps of:

determining in a patient tissue or body fluid stool sample comprising exfoliated cells or cellular debris a first amount of long nucleic acid of a length greater than 200 base pairs;

determining in said stool sample a second amount of nucleic acid of a length less than said long nucleic acid;

determining a ratio between said first amount and said second amount; and identifying a positive screen for a colorectal cancer or precancer if said ratio exceeds a threshold ratio for patients who do not have a colorectal cancer or precancer.

10. (Previously Presented) The method of claim 7, wherein said detecting comprises conducting an amplification reaction designed to amplify only nucleic acid fragments that are greater than 200 base pairs in length

11. (Cancelled)

12. (Previously Presented) The method of claim 7, further comprising the step of enriching said sample for human DNA.

13. (Previously Presented) The method of claim 7, further comprising the step of isolating human DNA from said sample.

14. (Cancelled)